

HIGH TEMPERATURE SUPER-CONDUCTING COILS SUPPORTED BY  
AN IRON CORE ROTOR

ABSTRACT OF THE DISCLOSURE

A rotor for a synchronous machine is disclosed comprising: a cylindrical magnetic solid rotor core; a race-track super-conducting coil winding extending around the rotor core; a coil support extending through the core and attaching to opposite long sides of the coil winding, and a pair of end shafts extending axially from said core and attached to the core.